

**Correspondence Sent to Multiple Parties**

# STATE OF ALASKA

## DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DESIGN & ENGINEERING SERVICES DIVISION  
SOUTHEAST REGION - DESIGN

TONY KNOWLES, GOVERNOR

6850 GLACIER HIGHWAY  
JUNEAU, ALASKA 99801-7999  
PHONE: (907) 465-4428  
TEXT: (907) 465-4647  
FAX: (907) 465-4414

September 20, 2002

Re: Gravina Access Project  
Project No. 67698

Dear Reviewer:

The attached report is the result of the full mission simulation report prepared to address concerns raised about the bridge alternatives under consideration as part of the Gravina Access Project. While the project is assessing low bridges, ferries, and the no action alternative, this full mission simulation work focused specifically on simulating large cruise ship traffic through Tongass Narrows. We were interested in the affect of bridge alternatives on cruise ship maneuvering in different areas of Tongass Narrows and this report provides a thorough review of the results of the simulation.

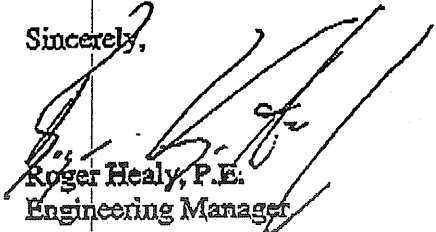
We have identified potential measures that could be employed to address marine navigation concerns associated with all of the bridge alternatives that were simulated. A brief discussion of each of these is listed below.

- 1) Additional Aids to Navigation. These could include range poles, more buoys, and range lights that could be provided to assist with navigation.
- 2) Tugs. Depending upon the alternative built, tug escorts similar to those employed in Skagway's or Juneau's harbor may be more frequent in inclement weather.
- 3) Dredging or Removal of Obstacles. Removal of the Starkweather knob and Buoy 4A off the cruise ship dock, removal of the concrete barge, removal of a portion of the West Channel reef to reduce the flood tide effects.
- 4) Relocation of the West Channel underwater cables to a non-midchannel or land based location. Relocation of the East Channel underwater cables to a land based location.
- 5) A vessel traffic system - a regulatory system rather than the voluntary system currently in place. The Southeast Alaska Voluntary Waterway Guide (February 2002) is a good start at recommending appropriate measures for deep draft vessels piloting Southeast Alaska. Short of a radar-based, manned operation, adopting as regulation some or all of the recommendations of the Waterway Guide may help address marine navigation concerns. An example would be the prohibition of vessel tie-ups on the outside of the Alaska Ship and Dry Dock between May 1 and September 30th.

- 6) Speed limit revisions to allow different speeds for deep draft vessels in West Channel to improve maneuvering capability.
- 7) Add a buoy to mark the extent of the 4 fathom hump immediately northwest of California Rock.
- 8) Removal of the wreck and wreck buoy "WR6".
- 9) Removal of the 5-fathom hump northwest of the Pennock Reef buoy "PR", or marking it with an appropriate aid to navigation.
- 10) Add a buoy to mark the extent of the shoal area at the south end of Pennock Island across from Potter Rock.

Thank you for your interest in the Gravina Access Project. If you have any questions, please don't hesitate to contact me at 465-1821.

Sincerely,



Roger Healy, P.E.  
Engineering Manager

# Memorandum



To: Concurring Agency Representatives  
Gravina Access Project

Date: 6/3/02

From: Roger Healy, Project Manager

Alaska Department of Transportation and Public Facilities

Subject: Addendum to the Identification of Reasonable Alternatives Recommended for Further Analysis in the Gravina Access Project National Environmental Policy Act Document

The Alaska Department of Transportation and Public Facilities (DOT&PF) is requesting that the concurrence agencies approve minor modifications to the reasonable alternatives and approve the addition of a previously rejected alternative to the mix of reasonable alternatives. DOT&PF proposes to amend the reasonable alternatives with the relatively minor changes discussed below. We ask that you review this information and provide a response back to me within three weeks. If you need additional time please let me know. A concurrence form is enclosed for your use.

As you may recall, in January 2001 DOT&PF identified seven build alternatives and the no action alternative as reasonable alternatives for the Gravina Access Project using a screening process that evaluated the 18 original build options using a comprehensive set of evaluation criteria. The reasonable alternatives were described in a November 29, 2000 proposed reasonable alternative package as:

- No-Action Alternative: Existing airport ferry continues to operate as the only public access to Gravina Island
- Alternative C3: 210-foot high bridge from Signal Road to the Airport
- Alternative C4: 210-foot high bridge from the Cambria Drive area to the Airport
- Alternative D1: 120-foot high bridge from the quarry area to the Airport
- Alternative F3: Pennock Island Crossing - 60-foot bridge over East Channel and 210-foot bridge over West Channel
- Alternative G2: Ferry route from Peninsula Point
- Alternative G3: Ferry route from Downtown Ketchikan
- Alternative G4: Ferry route adjacent to existing ferry



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The DOT&PF forwarded this list of reasonable alternatives to the state and federal concurring agency representatives<sup>1</sup> for formal concurrence under the interagency agreement to merge the National Environmental Policy Act (NEPA) and Section 404 processes. In March 2001, all agencies involved in the concurrence process concurred with DOT&PF's recommendation of reasonable alternatives.

During the following period, the DOT&PF and its consultant, HDR Alaska Inc. (HDR), conducted additional engineering and other technical studies to further analyze and refine the reasonable alternatives. As a result of this work, the conceptual designs for several of the bridge alternatives were altered slightly, and a variation of one bridge alternative was added to our list of reasonable alternatives. Specifically, the 210-foot vertical clearance bridges associated with alternatives C3, C4, and F3 were reconfigured as 200-foot vertical clearance bridges. This change was made to be consistent with the vertical clearance of other structures found along the west coast; a few keys structures such as the Seymour Narrows cable crossing and Vancouver Lion's Gate Bridge are set at or near 200 feet vertical clearance.

A new 120-foot bridge alternative was added in the same general location as Alternative C3. The reason a 120-foot alternative was added at this location is that, after crossing Tongass Narrows, it comes down more quickly to the airport terminal area than Alternative D1. The actual area of impact is very similar to the original C3. The new 120-foot bridge alternative is identified as Alternative C3(b) and the original 200-foot bridge at that location is identified as Alternative C3(a).

The landing of Alternative D1 is slightly different than shown in the original concurrence package dated November 29, 2000—the alignment now turns southward to parallel the shoreline on Gravina Island. This change has been previously discussed with state and federal agencies.

In addition, all alternatives now include an access road that runs parallel to and west of the airport runway (see the enclosed Gravina Access Alternatives figure dated March 2002). This access road has also been previously discussed and is included to provide each alternative with uniform access to other Borough developable lands. This intent is consistent with the needs expressed in the statement of purpose and need for more reliable, efficient, convenient, and cost-effective access to borough lands. In addition, the Borough has expressed clear interest in access to the area north of the airport for its near-term development potential. Limited development already occurs in this area. Revised descriptions of all the reasonable alternatives are provided as Attachment 1.

Based on the numerous engineering and technical studies conducted last year, the DOT&PF identified Alternative F3, the Pennock Island crossing, as its recommended alternative, as discussed in the cover letter accompanying the January 2002 Alternatives Evaluation Summary Report. Since release of that document, DOT&PF has received considerable input from the community, elected officials, and local, state, and federal agency representatives concerning the

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<sup>1</sup> The agencies signatory to or participating in the National Environmental Policy Act and Clean Water Act Section 404 merger agreement include the Alaska Department of Fish and Game, the Alaska Department of Environmental Conservation; the Alaska Department of Natural Resources; the U.S. Environmental Protection Agency; the U.S. Army Corps of Engineers; the National Marine Fisheries Service; and the U.S. Fish and Wildlife Service.



# Memorandum



reasonable alternatives. Many of the comments show support for a Pennock Island crossing, but there has been a great deal of interest and preference shown for an alternative that has a 200-foot high bridge over East Channel and an approximately 120-foot high bridge over West Channel. A complete description of Alternative F1 is provided at the end of Attachment 1.

The DOT&PF has also received clear indication from the Alaska Congressional delegation that the \$175 million cost ceiling could be increased to allow for the consideration of Alternative F1—this is new information. Based on this information and concerns raised in Ketchikan, DOT&PF proposes to change the cost criterion to an approximate maximum of \$225 million. F1 was originally determined to be unreasonable solely on the basis of cost; raising the cost criterion means that F1 should now be considered a reasonable alternative to study in the draft EIS. Therefore, DOT&PF proposes that Alternative F1 be included in the range of reasonable alternatives evaluated in the draft EIS. As a result, the DOT&PF is forwarding you this addendum to the reasonable alternatives concurrence that includes Alternative F1.

F1 is largely similar to F3, especially from the point it makes landfall on Pennock Island around to the airport. Once concurrence is secured, our intent is to prepare a separate analysis of F1 similar to the work conducted for all the reasonable alternatives that was summarized in the January 2002 Alternatives Evaluation Summary Report. We will forward that evaluation to you within a few weeks of the completion of this concurrence review.

## Attachments

CC: Rep. Bill Williams, Ketchikan  
Ketchikan Gateway Borough Assembly  
Ketchikan City Council  
Saxman City Council  
Saxman IRA Council  
Tim Haugh, FHWA  
Jim Helfinstine, USCG  
Jim Lomen, FAA  
Susan Dickinson, KGB  
Cape Fox Corporation  
Ketchikan Economic Development Authority  
Mark Dalton, HDR Alaska



## Interagency Working Agreement Concurrence Form

Project Description: **Gravina Access Project**—Improve access between Revillagigedo Island and Gravina Island in Ketchikan Gateway Borough.

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State Project #: 67698 Federal Project #: ACHP-0922(5)

Environmental Document: Environmental Impact Statement Date Concurrence Due: 06/07/02

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### *Concurrence Point*

- ☐ Purpose & Need ☒ Alternatives to be Analyzed - **Addendum**  
☐ Preferred Alternative
- 

### *Concurrence Response*

Having reviewed the information presented in reference to the above concurrence point(s), the agency representative, by his/her signature to this document signifies one of the following:

- ☐ Concurrence<sup>1</sup> ☐ Nonconcurrence<sup>2</sup>  
☐ Nonparticipation by choice<sup>3</sup> ☐ Nonparticipation by constraint<sup>4</sup>

Comments/Reasons for nonconcurrence: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Agency

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

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<sup>1</sup> Concurrence means that the information is adequate for the stage under development and the project may proceed to the next stage without modification.

<sup>2</sup> Nonconcurrence means that the information is not adequate to address the stage under development, or the potential adverse impacts of the project are unacceptable, or the project should be modified to reduce impacts.

<sup>3</sup> Nonparticipation by choice means that, based on the information provided, it appears that any regulatory or resource issues can be resolved at the next stage or phase of development.

<sup>4</sup> Nonparticipation by constraint means that the agency does not have the ability to participate in the process at this point. This is not be construed as nonparticipation by choice.

**Attachment 1**  
**GRAVINA ACCESS PROJECT**  
**REVISED DESCRIPTIONS OF CURRENT REASONABLE**  
**ALTERNATIVES and ALTERNATIVE F1**  
**May 7, 2002**

**No-action Alternative**

The No-action Alternative would not result in improved access between Gravina Island and Revillagigedo Island. Access to Ketchikan International Airport and Gravina Island from Revillagigedo Island would continue to be possible only from the existing airport ferry shuttle, private boat, and floatplane. There is no construction associated with this alternative. The new airport ferry currently under construction for the existing ferry shuttle would continue as planned.

**Alternative C3(a)**

Alternative C3(a) is a bridge that would span Tongass Narrows approximately 500 meters (1,600 feet) north of the airport terminal. The main span of the bridge would have a vertical clearance of 61 meters (200 feet) and a horizontal clearance of approximately 198 meters (650 feet). The vertical and horizontal clearances of the main span would allow for one-way passage of cruise ships and two-way passage for most other ships, including Alaska State ferries. The bridge would connect to Signal Road on Revillagigedo Island and would traverse the hillside southward, gaining elevation and turning southwestward to cross Tongass Avenue and Tongass Narrows, and then turning southward to parallel the airport runway and touch down south of the terminal. An airport return loop road would connect the terminal to the bridge. The road would continue around the south end of the airport runway and then arc northward, extending parallel to and west of the airport runway approximately 3.5 kilometers (2.2 miles) to the north end of the Airport Reserve property. The road at the south end of the runway would be constructed at a grade low enough to allow for future runway expansion plans; i.e., the runway or runway safety area could be expanded as an overpass of the road.

**Alternative C3(b)**

Alternative C3(b), a variant of Alternative C3(a), involves a lower bridge structure and a slightly different alignment. Alternative C3(b) includes a 37-meter (120-foot) high bridge with a 152-meter (500-foot) wide main span, providing clearance for *Columbia*-class ferries, but not larger cruise ships. This variant would have the same general alignment on Revilla and Gravina Islands as Alternative C3(a); however, the bridge over Tongass Narrows would be positioned approximately 300 meters (1,000 feet) farther north. With this alignment, the bridge would touch down (reach the ground surface) in front of the airport terminal and eliminate the need for an airport return loop road.



#### **Alternative C4**

Alternative C4 is a bridge that would span Tongass Narrows approximately 500 meters (1,600 feet) north of the airport terminal. The main span of the bridge would have a vertical clearance of 61 meters (200 feet) and a horizontal clearance of approximately 198 meters (650 feet). The vertical and horizontal clearances of the main span would allow for one-way passage of cruise ships and two-way passage for most other ships, including state ferries, under the bridge. The bridge would connect to Tongass Avenue north of Cambria Drive and would continue northward, traversing the hillside around the quarry, crossing over Tongass Avenue and Tongass Narrows, and then turning southward to parallel the airport runway, and touch down south of the terminal. An airport return loop road would connect the terminal to the bridge. The road would continue around the south end of the airport runway and then arc northward, extending parallel to and west of the airport runway approximately 3.5 kilometers (2.2 miles) to the north end of the Airport Reserve property. The road at the south end of the runway would be constructed at a grade low enough to allow for future runway expansion plans; i.e., the runway would be expanded as an overpass of the road.

#### **Alternative D1**

Alternative D1 is a bridge that would span Tongass Narrows directly across from the airport terminal. The bridge would be 37 meters (120 feet) high and have a horizontal span of 152 meters (500 feet), providing clearance for *Columbia* class ferries, but not larger cruise ships. The bridge would start at Tongass Avenue near the airport ferry terminal, rise along the hillside behind the quarry, turn westward to cross over Tongass Avenue and Tongass Narrows, and then turn southward to parallel the shoreline on Gravina Island. An airport return loop road would connect the terminal to the bridge. The road would continue around the south end of the airport runway and then arc northward, extending parallel to and west of the airport runway approximately 3.5 kilometers (2.2 miles) to the north end of the Airport Reserve property. The road at the south end of the runway would be constructed at a grade low enough to allow for future runway expansion plans; i.e., the runway would be expanded as an overpass of the road.

#### **Alternative F3**

Alternative F3 crosses Pennock Island and the east and west channels of Tongass Narrows. This alternative would start at Tongass Avenue south of the U.S. Coast Guard Base and north of the Forest Park Subdivision and cross the east channel of Tongass Narrows to Pennock Island with an approximately 18-meter (60-foot) high bridge. The alternative would cross Pennock Island at grade and then use a second 61-meter (200-foot) high bridge over the west channel to Gravina Island. The horizontal clearance of the west channel bridge would be approximately 168 meters (550 feet) wide, which is wider than the natural channel available for large vessels (deeper than 5 fathoms). The west channel bridge is designed to accommodate larger cruise ships. From the west channel bridge, the road would continue northward approximately 9.5 kilometers (5.9 miles) to the north end of the Airport Reserve property. An airport access road would be constructed at the south end of the airport runway and turn northward to the airport

terminal. The road at the south end of the runway would be constructed at a grade low enough to allow for future runway expansion plans; i.e., the runway would be expanded as an overpass of the road.

### **Alternative G2**

Alternative G2 is a ferry route that would complement the existing airport ferry. The Alternative G2 ferry route would transport cars and passengers between Peninsula Point and Lewis Point on Gravina Island. This alternative would require construction of a new ferry slip on each side of Tongass Narrows. A road would be constructed on Gravina Island from the ferry terminal southward approximately 4.5 kilometers (2.8 miles), then wrap around the southern end of the airport runway and turn northward to the airport terminal. The road at the south end of the runway would be constructed at a grade low enough to allow for future runway expansion plans; i.e., the runway would be expanded as an overpass of the road. The Alternative G2 ferry schedule would be similar to the existing airport ferry schedule with two ferries in operation during the summer.

### **Alternative G3**

Alternative G3 is a ferry route that would complement the existing airport ferry. The Alternative G3 ferry route would transport cars and passengers between a location in downtown Ketchikan in the vicinity of the Plaza Mall at Jefferson Street to Gravina Island, south of the airport. This alternative would require construction of a new ferry slip on each side of Tongass Narrows. A road would be constructed on Gravina Island from the ferry terminal northward approximately 4.8 kilometers (3.0 miles) to the north end of the Airport Reserve property. An airport access road would be constructed around the southern end of the airport runway. The road at the south end of the runway would be constructed at a grade low enough to allow for future runway expansion plans; i.e., the runway would be expanded as an overpass of the road. The Alternative G3 ferry schedule would be similar to the existing airport ferry schedule with two ferries in operation during the summer.

### **Alternative G4**

Alternative G4 involves adding ferry service in close proximity to the existing ferry route. This would require construction of two new terminals, one on either side of Tongass Narrows, adjacent to the existing airport ferry terminals. This alternative includes a road on Gravina Island that extends southward from the airport ferry terminals, wraps around the southern end of the airport runway, and then arcs northward, extending parallel to and west of the airport runway approximately 3.5 kilometers (2.2 miles) to the north end of the Airport Reserve property. The road at the south end of the runway would be constructed at a grade low enough to allow for future runway expansion plans; i.e., the runway would be expanded as an overpass of the road. The Alternative G4 ferry schedule would be similar to the existing airport ferry schedule with two ferries in operation during the summer.

## Alternative F1

Alternative F1 crosses Pennock Island and the east and west channels of Tongass Narrows. This alternative would start at Tongass Avenue just north of the cemetery, rise to the south along the hillside behind the cemetery and the U.S. Coast Guard Base, and then turn westward and cross over Tongass Avenue and the east channel of Tongass Narrows to Pennock Island with an approximately 61-meter (200-foot) high bridge (see attached graphic—*Alternative F1*). This alternative would cross Pennock Island at grade and then use a second, 37-meter (120-foot) high bridge to extend over the west channel of Tongass Narrows to Gravina Island. The horizontal clearance of the east channel bridge would be approximately 198 meters (650 feet) wide and the west channel bridge would provide approximately 160 meters (525 feet) of horizontal clearance. The east channel and west channel bridges would be 1.3 and 0.6 kilometers (0.8 and 0.4 miles) long, respectively.

From the west channel bridge, the road would continue northward approximately 9.5 kilometers (5.9 miles) to the north end of the Airport Reserve property in the same alignment as F3. An airport access road would be constructed at the south end of the airport runway and turn northward to the airport terminal. The road at the south end of the runway would be constructed at a grade low enough to allow for future runway expansion plans; i.e., the runway would be expanded as an overpass of the road.



# FAX

HDR Alaska, Inc  
2525 C Street, Suite 305  
Anchorage, AK 99503

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Date: 5/3/02

To (Fax):           907-225-0190  
907-247-6042       907-225-6322  
907-225-6291       907-225-2104  
907-225-6729       907-225-2478

From: Mark Dalton  
          Kristen Maines  
Phone: 907-274-2000  
Fax:    907-274-2022

This fax (2 pages) is a courtesy notice to inform you of the latest work being conducted for the Gravina Access Project.

### **Gravina Access Project Background**

The Alaska Department of Transportation and Public Facilities (DOT&PF) is pursuing alternatives for improving access between Revillagigedo Island and Gravina Island in Ketchikan. The Gravina Access Project is one of 16 high priority projects funded in the state under the Federal Transportation Equity Act for the 21<sup>st</sup> Century and involves examining ways to link Revillagigedo Island to Gravina Island.

### **Geotechnical and Geophysical field work to begin Monday May 6**

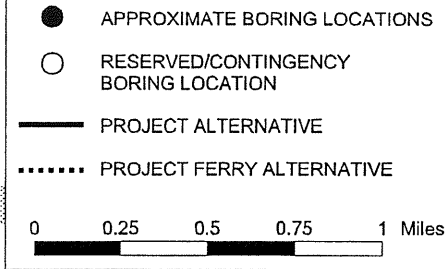
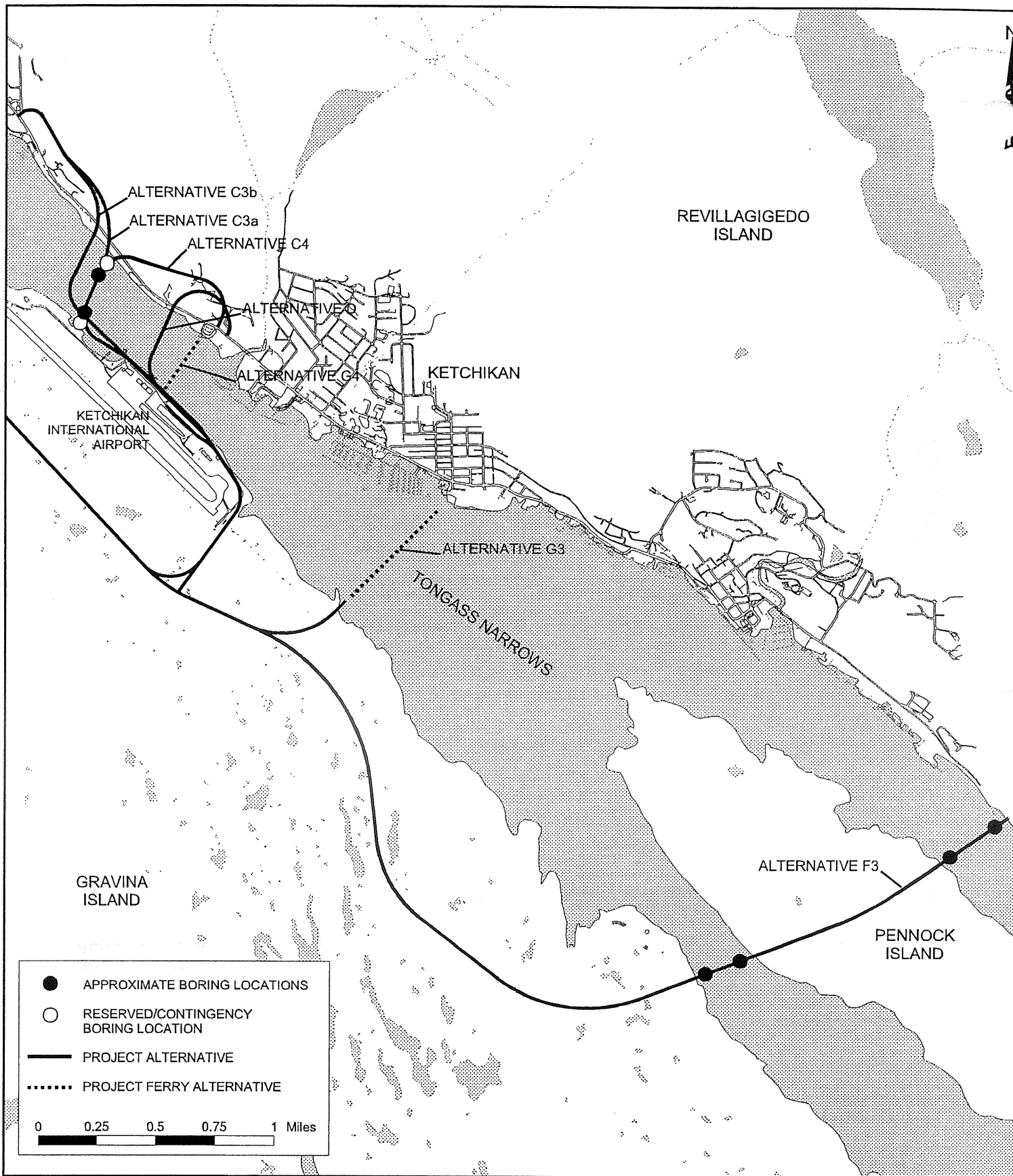
During the next few weeks, conventional geotechnical drilling will be taking place at three general locations in the project area in Ketchikan (please refer to the Proposed Boring Location map attached). The purpose of the conventional drilling program is to conduct limited onsite (over-water) subsurface explorations for assessing the feasibility of bridge alternatives in two areas presently deemed most suitable for a bridge-crossing.

Subsurface conditions will be explored in two areas, for those alternatives that cross Tongass Narrows near the airport and across Pennock Island. A total of eight borings are proposed. Two borings, one on each side of the main channel will be advanced for the alternatives near the airport. Four borings will be advanced at Pennock Island, one on each side of the two channels. The seventh and eighth borings are reserved or contingency borings.

The drilling equipment is scheduled to arrive Monday, and drilling will begin on Tuesday morning in East Channel, then move to West Channel, and then to the north end of Tongass Narrows. HDR anticipates approximately 8 days for completing the borings, not considering delays due to adverse weather conditions.

The geophysical work will be conducted in two consecutive phases beginning next week; not considering weather days, the geophysical survey will take approximately 12 days. The surveying is conducted entirely from a vessel moving through Tongass Narrows. It is not expected that the geophysical survey work will impede marine navigation in the Narrows in any way.

Thank you for your cooperation and assistance over the next few weeks. If you need any further information, please feel free to contact Mark Dalton or Kristen Maines at 907.274.2000.



PURPOSE: IMPROVE ACCESS BETWEEN GRAVINA ISLAND AND REVILLAGIGEDO ISLAND

Location: T. 75S, R. 90E,  
Section 15, C.R.M.  
T. 75S., R 91E,  
Sections 31 & 32 C.R.M

## PROPOSED BORING LOCATIONS

APPLICATION BY:  
ALASKA DEPARTMENT OF TRANSPORTATION  
AND PUBLIC FACILITIES  
SOUTHEAST REGION  
6860 GLACIER HIGHWAY  
UNIFORM ALASKA 68604 7600

## GRAVINA ACCESS PROJECT

IN: Tongass Narrows  
AT: Ketchikan, Alaska

Sheet 2 of 2

Date: April 2002

**Dalton, Mark**

**From:** Roger Healy [Roger\_Healy@dot.state.ak.us]  
**Sent:** Wednesday, November 22, 2000 4:29 PM  
**To:** Tim Haugh  
**Cc:** mdalton@hdrinc.com; reuben\_yost@dot.state.ak.us; Al Fletcher; Aaron Weston; David C Miller; John Lohrey; tracy moore; Pat Kemp  
**Subject:** Re: Gravina - PDT

Tim,

I am comfortable with G1 being unreasonable since:

- There is no improvement in travel time or convenience to the Airport. Travel time has been identified in the Purpose and Need screening factor definitions. The methodology is presented in the Travel Time Calculations memo and represents the work and analysis of HDR/ADOT/FHWA staff. The most recent version of this was presented in a September transmittal of the Screening of Alternatives. While there has always been trepidation in using travel time numbers as a definitive demarcation between alternatives if the differences were inside a reasonable range of uncertainty, the use of travel time as a general point

of comparison to the NB, and subsequent screening against the P&N, is warranted particularly given the wide range of travel time between G1 and the NB. To summarize, travel times are derived from the distance between origin and terminus multiplied by the projected speed of vehicles, bicycles, and pedestrians. Ferry travel times are calculated based on surveyed time of the NB transit and waiting time, plus the overwater time for the new ferry options.

G1's best case scenario compared to the NB travel times to the Airport (for any segment of the KTN population) is 14 minutes slower, or in percentages, 40% slower than the NB. This determination alone would seem to be a reasonable criterion for declaring G1 unreasonable, but according to previous emails, no ferry alternatives can be declared unreasonable based on travel times alone. The G1 Revilla Terminal would be approximately 5 miles distant from the center of Ketchikan's population, and a returning 5 miles to the Airport. The Revilla side commute is on a congested two lane highway. During rush hour,

travel times could be expected to double and a new traffic light near Wal-Mart will again cause delays for the majority of users. The travel times used for this alternative are optimistic at best. If the alternative does not improve convenience or reliability to the majority of users, I am hard pressed to find it a reasonable alternative

- no improvement in reliability since if the NB ferry were out of commission it would be an operational decision to run supplemental ferries at the NB/G4 location to restore convenience to the majority of residents. Additionally, the operation and maintenance of this operation is placed upon the Ketchikan Borough. It would be a reasonable operational decision during low volume periods to terminate this alternative in favor of the NB convenience.

- 4(f) property. I am not a NEPA expert, but it is my understanding that if we are planning development in a 4(f) area, the first thing we have to do is look for an alternative outside of the 4(f) area. Alternatives to the north further declines the convenience of the alternative for users and involves substantial human impacts. Private boat harbors, waterside residences, commercial properties, and Ward Cove are to the south. Beyond Ward Cove is the departing point of G2.

- the Ketchikan community agrees with this alternative being unreasonable.

While our narratives to date are oriented towards the reasoning behind elimination of alternatives, we still need to present a concise discussion as to how and why the reasonable alternatives were selected. Given the sum of factors above and no obvious merits, I think we will be hard pressed to develop our reasons for declaring G1 reasonable. I believe it is not reasonable or prudent to expend further public monies to investigate this alternative and its impacts in the DEIS. Unless otherwise indicated, we intend to drop this alternative from reasonable analysis.

G2. It is my contention that G2 and G3 should be removed from further discussion in the DEIS or combined with G4 into a Marine alternative because G4 is representative of this range of alternatives. G4 offers obvious and quantifiable advantages to either option in travel times, convenience to users, operational flexibility, costs, environmental impacts, navigational concerns, impacts to land use, anadromous streams etc. Compared to the NB, G2's best case scenario for travel time to the Airport is 7 minutes slower than the NB alternative, or approximately 20% slower than the NB. Similar to G1, lower travel

times only benefit pedestrian and bicyclists departing from Ward Cove/north and traveling to Borough or private lands.

This is a minority of users. Pedestrian and bicycle travel along North Tongass from Pt. Higgins/Ward Cove to the terminal is not well provided for. Stated environmental concerns from USFWS of impacts to eagles nests and wildlife habitat would appear to lend credence to an unreasonable determination. Because of the eagle trees, we will immediately go looking for

another terminal site, and because of the increasing environmental impacts to Lewis Reef to the north and the increasing similarity to G4 as we move south, I contend that G2 should be unreasonable or combined with G4 into a Marine alternative. However, we will carry G2 and G3 through to the PDT meeting. It will be DOT's intent to combine the remaining ferry alternatives into one Ferry alternative. The DEIS strategy would be to compile the existing benefit and impact information regarding G2, G3, and G4, and perform an optimization study to determine the best new terminal locations for the Ferry alternative. The focus of new impact analysis would be confined to the optimal site. Again, with one comprehensive ferry alternative being sufficiently representative of all three existing alternatives, it is my contention that complete separate studies of G2, G3, and G4 during the DEIS is not a prudent use of public funds.

In summary, the net effect of the entire screening process to date has been to declare alternatives unreasonable solely on the basis of cost. No alternative has been allowed to be dismissed on the basis of any other factor or combination of factors. I contend that the combined convenience, environmental, human, and property impacts declare G1 as unreasonable.

Thanks, RKH

Tim Haugh wrote:

> Roger, I just reviewed the package this morning and met with Dave Miller, Al Fletcher, and Aaron Weston this afternoon. I have a few comments on the package, but the most important issue for FHWA is alternatives G1 and G2. First G1. Based on the info provided, we are not comfortable saying G1 is not reasonable. The assessment relies heavily on the 4f issue, but provides no discussion that would imply an analysis was performed that would provide quantitative data as to what impacts would result from avoiding the park. Secondly, based on the info provided, FHWA unanimously believes that G2 appears reasonable.

>

> If the state believes that these two alternatives are not reasonable, maybe we should meet to discuss. I think my folks would like an explanation of the methodology of determining travel time. For G1, I will definitely need a more detailed quantitative evaluation of the 4f question.

>

> Tim A. Haugh  
> Environment/Realty Specialist  
> Phone: (907) 586-7430  
> Fax: (907) 586-7420

>

> >>> Roger Healy <Roger\_Healy@dot.state.ak.us> 11/21/00 03:27PM >>>

> Mark,

> On G2 Reuben and I had the following comment. It would be  
> preferable to stress the wildlife habitat loss first and identify that  
> there is no improvement to the efficiency and convenience to the KIA  
> secondly - but leave the grading against the P&N out of the sentence.  
> The conclusion is fine by me.

>

> For the purposes of updating Tim and Reuben, G2 crossed over the  
> reasonable bar because of a recent conversation that you (Mark) had with  
> Steve Brockman of Fish and Wildlife who was concerned about the adjacent  
> eagle nests and bear and deer habitat in the Lewis Point area. Based on  
> FWS's comments and no real improvement to the P&N for the KTN residents,  
> we recommend removing G2 from reasonable. Steve called Mark because he  
> was not able to make the PDT meeting, and wanted to insert his comments  
> at this time. Mark has a telephone log of the conversation.

>

> Any other comments? Mark will be sending the material out to the PDT  
> on Wednesday, the 22nd. Thanx, RKH